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(71) Applicant (for all designated States except US): **AK-TIEBOLAGET SKF [SE/SE]**; S-415 50 Göteborg (SE).

(72) Inventors; and

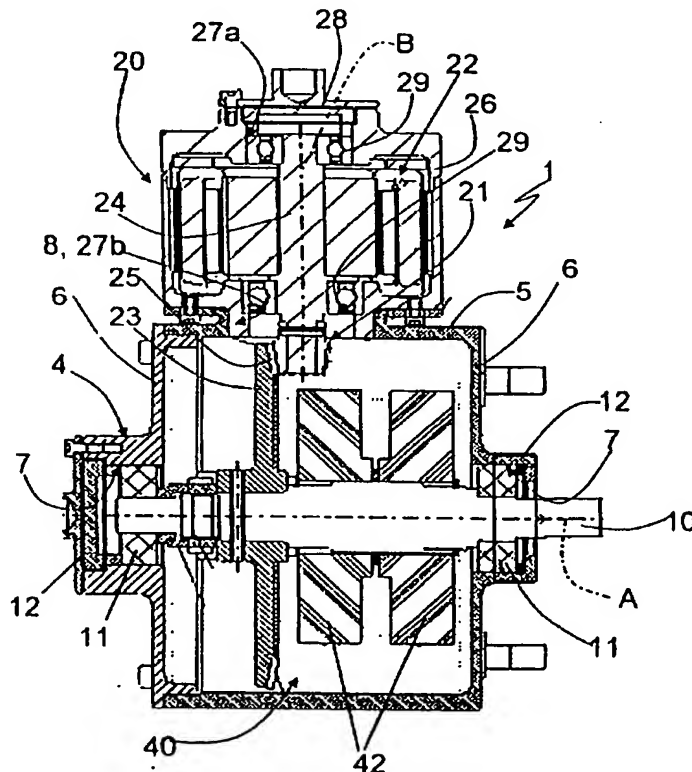
(75) Inventors/Applicants (for US only): **DI STEFANO, Enrico [IT/IT]**; Via Fratelli Macario, 61b, I-10090 Cascine Vica (IT). **ROSSI, Mario [IT/IT]**; Via Sestriere, 63/20, I-10090 Rivoli (IT).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A FEEDBACK ASSEMBLY FOR AN ELECTRONICALLY CONTROLLED ELECTRO-MECHANICAL ACTUATING UNIT FOR A MOTOR VEHICLE



(57) Abstract: A feedback assembly (1) for an electronically controlled electro-mechanical actuating unit (2) for a motor vehicle, the feedback assembly (1) having a connection to the actuating unit (2), a shaft (10), which is angularly fixed to a steering member of the motor vehicle, and an electrical actuator (20), which is angularly coupled to the shaft (10) for exerting a resistant torque on the shaft (10) itself according to the conditions of movement of the motor vehicle; a mechanical transmission (21) with concurrent axes (A, B) being set between the electrical actuator (20) and the shaft (10).



**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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A. CLASSIFICATION OF SUBJECT MATTER  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 B62D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 283 859 B1 (KOESTER STEPHEN P ET AL) 4 September 2001 (2001-09-04) column 6, line 31 - line 60 column 8, line 38 - line 47 column 9, line 10 - line 52 column 11, line 30 - line 62 column 13, line 22 - line 28	1,6
Y	figure 4	7,8
Y	DE 101 57 797 A (CONTINENTAL TEVES AG & CO OHG) 19 September 2002 (2002-09-19) column 5, line 38 - line 44 --- -/--	7,8



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 10, 10 October 2002 (2002-10-10) -& JP 2002 160659 A (HONDA MOTOR CO LTD), 4 June 2002 (2002-06-04) abstract figures 1-3 ----	1-3
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10, 31 August 1999 (1999-08-31) -& JP 11 139335 A (TOYOTA MOTOR CORP), 25 May 1999 (1999-05-25) abstract figure 1 ----	1
A	US 6 176 341 B1 (ANSARI ADIL) 23 January 2001 (2001-01-23) figure 1 ----	2
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Information on patent family members

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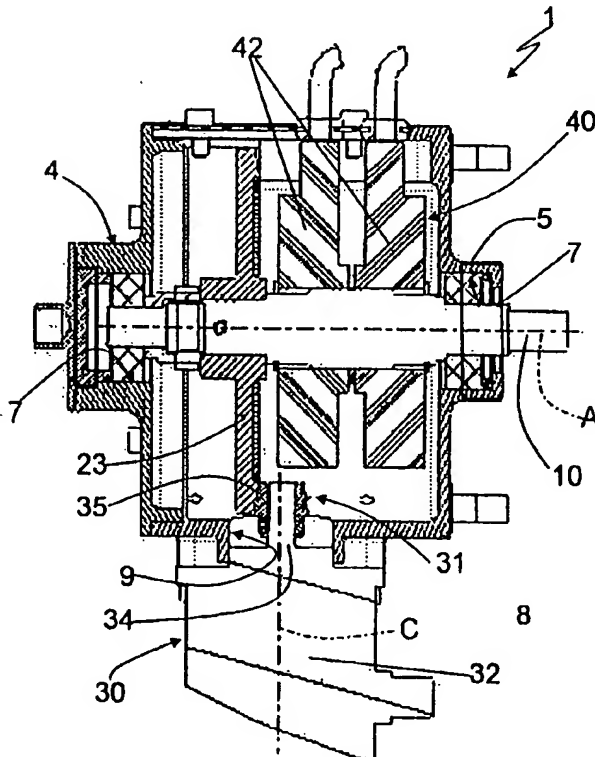
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